

REMARKS

At the outset, the courtesies extended by the Examiner in granting the 13 September 2004 interview, and the professionalism she demonstrated during that interview, are appreciatively noted. At the interview, the references cited by the Examiner in the 9 June 2004 final Office Action were discussed in light of the clarifying amendments proposed to independent Claim 18 by the undersigned attorney, as set forth herein.

Responsive to the 9 June 2004 final Office Action and the discussions had at the interview, Claim 18 is now further amended for continued prosecution with the other pending claims. Certain of the other pending Claims have also been amended to remove an obvious typographical error found therein. It is believed that with such amendment of the pending claims, there is a further clarification of their recitations.

In the final Office Action, the Examiner rejected Claims 18 – 33 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner stated that the terminology “high vacuum” is not sufficiently clear. Accordingly, the term “high” is now removed from Claims 18 and 20 to avoid potential confusion. It is believed that the

Examiner's formal concerns under 35 U.S.C. § 112, second paragraph, are therefore obviated.

Also in the Office Action, the Examiner rejected Claims 18 – 19, 23 – 24, 26 – 31 under 35 U.S.C. § 102(b) as being anticipated by the Schilling et al. reference. The Examiner further rejected Claims 18 – 32 under 35 U.S.C. § 103(a) as being unpatentable over Schilling et al. in view of the Feldman reference. In setting forth this rejection, the Examiner acknowledged that Schilling et al. fails to disclose the use of multiple layers or the pre-coating of fabric with a polymer in order to enhance particle adhesion. The Examiner, however, cited Feldman for teaching such features, and concluded that it would have been obvious to one of ordinary skill in the art to have incorporated those features into the Schilling et al. method.

The Examiner additionally rejected Claim 33 under 35 U.S.C. § 103(a) as being unpatentable over Schilling et al. in view of Feldman, further in view of the Bieler et al. reference. In setting forth this rejection, the Examiner acknowledged that neither Schilling et al. nor Feldman discloses the use of metal containing ceramic powders. The Examiner cited Bieler et al., though, for teaching both metal and ceramic powders in the coating of fibers by vacuum plating. Again, the Examiner concluded that it would have been obvious to one of ordinary skill in the art to have incorporated such feature into the Schilling et al. method. As newly-amended independent Claim 18 now more clearly recites, Applicant's method

includes among its combination of features “establishing a fiber matrix within a vacuum space,” having “at least one planarly extended open grid layer,” and defining a flow path that runs “transversely through said open grid layer.” The method also includes among its features exciting a flow of metal particles “against said fiber matrix,” so as “to accumulate a metallic structure to be planarly extended thereacross.” As Claim 18 also now more clearly recites, “at least a portion of said metal particles attach[] to a first portion of said fiber matrix,” while “a second portion of said fiber matrix remain[s] unattached to said metal particles.”

The full combination of these and other features now more clearly recited by Applicants’ pending Claims is nowhere disclosed by the cited references. Note in this regard that Schilling et al. is directed quite specifically to a more durable screen printing fabric. That is, Schilling et al. necessarily prescribes a fabric whose mutually crossing strands allow for the passage of paint, ink, or other print substance therethrough. This then requires the metallic casing prescribed by Schilling et al. to be realized in a form which wraps, or encapsulates, each individual strand of the resulting fabric. The crossing threads 12, 14 are thus clearly shown in Fig. 3 of the reference to each be completely encased within a casing layer 18 and a further encasing metal coating layer 22 formed coaxially thereabout.

This teaches plainly against establishing any flow path through a planarly extended open grid layer of a fiber matrix so as to “accumulate a metallic structure to be planarly extended thereacross,” as Claim 18 more clearly recites. Indeed, the inherent function of Schilling et al.’s screen printing fabric necessarily precludes any accumulation of a metallic structure in such manner thereon, lest the free passage of ink therethrough be impeded, or altogether blocked. The requisite encapsulation, moreover, precludes any resulting structure wherein “metal particles attach[] to a first portion of ...[a] fiber matrix,” while “a second portion of said fiber matrix remain[s] unattached to said metal particles,” as newly-amended independent Claim 18 now more clearly recites.

Given such contrary teachings of the primarily-cited Schilling et al. reference, the incidental teachings of Feldman and Bieler et al. remain ineffectual to the present patentability analysis. Neither of those references provides for such features as the generation of a “flow path transversely through said open grid layer of said fiber matrix,” much less for the accumulation thereby of a “metallic structure to be planarly extended” across that fiber matrix, in the manner now more clearly recited by Claim 18.

It is respectfully submitted, therefore, that the cited Schilling et al. references, and the Feldman and Bieler references, even when considered together, fail to disclose the unique combination of elements now more clearly recited by

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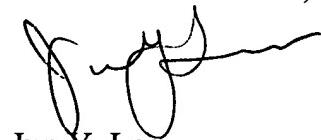
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Reply to Office Action dated 9 June 2004

Applicants' pending claims for the purposes and objectives disclosed in the subject Patent Application.

It is believed that the subject Patent Application has now been placed fully in condition for allowance, and such action is respectfully requested.

Respectfully submitted,
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